

RED CEDAR RIVER COLLECTIONS (IOWA)

BY DAVID T. JONES, MARIETTA COLLEGE, MARIETTA, OHIO

The following list is of mollusks collected in the vicinity of Vinton, Iowa, during July and August 1930, from the Red Cedar River, its tributaries, and the wooded banks of the same. It supplements and extends the range of the list published in *The Nautilus* of April 1930 (Vol. XLIII, No. 4). The *Strobilops labyrinthica* of that list should be *Strobilops labyrinthica virgo* Pilsbry. Its habitat at West Bluffs has been all but destroyed by the building of a new road. This summer's work has also proven that the boundaries of the colony of *Hendersonia occulta* at East Bluffs were not as circumscribed as they first appeared. Both living and subfossil specimens were taken quite plentifully at several points. The range of the former list was within a radius of approximately five miles of Vinton, whereas this list ranges from Vinton some forty miles northward. Records already in the previous list are not repeated, though many such were duplicated this season. No mussels were reported in the previous article. Old names of mussels reported herein are given after the preferred names for the convenience of collectors that have learned the older terminology. I am under obligations to Prof. H. R. Eggleston of Marietta College for helping with the identification of the mussels, and locally to Stanley Peterson, Russell Burkhart, and Oscar J. Workman for aid in collecting snails and mussels.

Polygyra hirsuta (Say). East Bluffs and Stony Cut near Vinton, Dry Run and Evangelical Camp Grounds near Cedar Falls.

Polygyra monodon (Rackett). Black Hawk Creek near Waterloo.

Polygyra fraterna (Say). Dry Run near Cedar Falls.

Polygyra multilineata (Say). Dry Run near Cedar Falls—var *rubra* Witter-common.

Polygyra profunda (Say). Cedar River below dam at Cedar Falls—drift material.

- Strobilops l. virgo* (Pilsbry). West Bluffs and East Bluffs near Vinton.
- Gastrocopta armifera* (Say). East Bluffs near Vinton.
- Gastrocopta contracta* (Say). East Bluffs near Vinton.
- Retinella hammonis* (Ström). Dry Run and Evangelical Camp Grounds near Cedar Falls.
- Glyphyalinia indentata* (Say). East Bluffs near Vinton; Black Hawk Creek near Waterloo.
- Zonitoides arboreus* (Say). East Bluffs and Stony Cut near Vinton.
- Agriolimax agrestis* (L.) East Bluffs near Vinton.
- Agriolimax campestris* (Binney). Dry Run near Cedar Falls; Black Hawk Creek near Waterloo.
- Anguispira alternata* (Say). Dry Run and Evangelical Camp Grounds near Cedar Falls.
- Gonyodiscus cronkhitei anthonyi* (Pilsbry). Dry Run and Evangelical Camp Grounds near Cedar Falls; Stony Cut near Vinton; Black Hawk Creek near Waterloo.
- Succinea avara* (Say). Below dam at Cedar Falls, Big Creek at La Porte City; Black Hawk Creek at Waterloo.
- Succinea ovalis* (Say). Dry Run and Evangelical Camp Grounds near Cedar Falls; Stony Cut near Vinton.
- Succinea retusa* (Lea). East Bluffs near Vinton; Dry Run, Cedar River below dam, and Evangelical Camp Grounds near Cedar Falls; Black Hawk Creek near Waterloo.
- Stagnicola caperata* (Say). Dry Run and Evangelical Camp Grounds near Cedar Falls.
- Fossaria modicella rustica* (Lea). East Bluffs near Vinton; Dry Run near Cedar Falls.
- Fossaria parva* (Lea). Cedar River at Stony Cut near Vinton.
- Gyraulus parvus* (Say). Dry Run near Cedar Falls.
- Helisoma trivolvis* (Say). Cedar River below dam and Dry Run near Cedar Falls; Black Hawk Creek near Waterloo; Cedar River at Stony Cut near Vinton.
- Planorbula crassilabris* (Walker). Dry Run and Evangelical Camp Ground near Cedar Falls; Black Hawk Creek near Waterloo.

Physa gyrina (Say). Cedar River below dam, Dry Run, and Evangelical Camp Grounds near Cedar Falls; Cedar River at Stony Cut near Vinton; Black Hawk Creek near Waterloo.

Physa integra (Hald). Cedar River below dam at Cedar Falls; Cedar River at Stony Cut near Vinton.

Physa michiganensis (Clench). Dry Run and Evangelical Camp Grounds near Cedar Falls.

Ferrissia tarda (Say). Cedar River below dam at Cedar Falls.

Campeloma decisum (Say). Cedar River below dam at Cedar Falls (with embryonic shells); mouth of Mud Creek near Vinton.

Somatogyrys integer (Say). Cedar River below dam at Cedar Falls.

Pomatiopsis cincinnatiensis (Lea). Dry Run and Evangelical Camp Grounds near Cedar Falls.

Pomatiopsis lapidaria (Say). Cedar River below dam, Dry Run, and Evangelical Camp Grounds near Cedar Falls.

Pleurocera acuta Raf. Cedar River near mouth of Mud Creek and Cedar River at Stony Cut near Vinton (drift material); rapids below dam at Cedar Falls (living).

Quadrula pustulosa (Lea). Cedar River at East Bluffs and Stony Cut near Vinton; also Cedar River at Vinton.

Quadrula quadrula (Raf.) = *Quadrula lachrymosa* (Lea). Two doubtful, immature specimens from Cedar River at Stony Cut near Vinton.

Amblema peruviana (Lam.) = *Quadrula plicata* (Say). Cedar River at East Bluffs and Cedar River at Stony Cut near Vinton; Black Hawk Creek near Waterloo; Big Creek at La Porte City; below dam in Cedar River at Cedar Falls.

Fusconaia flava (Raf.) = *Quadrula rubiginosa* (Lea.) Cedar River at Stony Cut and East Bluffs near Vinton; also at Vinton.

Fusconaia ebenus (Lea.) = *Quadrula ebena* Lea. Cedar River at Stony Cut near Vinton.

Strophitus rugosus (Swainson) = *Strophitus edentulus* (Say). Cedar River at Vinton.

- Anodonta grandis* Say. Black Hawk Creek near Waterloo; Cedar River below dam at Cedar Falls; Big Creek at La Porte City; Goarcke's Lake at Vinton; Cedar River at Stony Cut near Vinton.
- Lasmigona complanata* (Barnes) = *Symphynota complanata* (Barnes). Cedar River at East Bluffs near Vinton; Cedar River at Stony Cut near Vinton (two juveniles); Cedar River at Cedar Falls.
- Lasmigona costata* (Raf.) = *Symphynota costata* (Raf.). Cedar River below dam at Cedar Falls; Cedar River at Stony Cut near Vinton.
- Proptera alata* (Say) = *Lampsilis alata* (Say). Cedar River at East Bluffs, one fine large specimen 18.5x13.0x7.4 cm.
- Actinonaias carinata* (Barnes) = *Lampsilis ligamentina* (Lam.) Cedar River at East Bluffs and Stony Cut near Vinton; Cedar River below dam at Cedar Falls; Big Creek at La Porte City.
- Carunculina parva* (Barnes) = *Lampsilis parva* (Barnes). Cedar River below dam at Cedar Falls—one perfect valve.
- Ligumia recta latissima* (Raf.) = *Lampsilis recta* (Lam.) Cedar River at East Bluffs near Vinton—shells with both white and pink naere.
- Lampsilis siliquoides* (Barnes) = *Lampsilis lutcola* (Lam.) Big Creek at La Porte City, male and female; Black Hawk Creek near Waterloo, male; Cedar River below dam at Cedar Falls, male; Cedar River at Stony Cut near Vinton, male.
- Lampsilis ventricosa* (Barnes). Black Hawk Creek near Waterloo; Cedar River below dam, and Dry Run at Cedar Falls; Cedar River at Vinton; Cedar River at East Bluffs and Cedar River at Stony Cut near Vinton. By far the most common form in the Red Cedar Valley.
- Sphaerium rhomboideum* (Say). Cedar River below dam at Cedar Falls.
- Sphaerium simile* (Say). Cedar River below dam at Cedar Falls.
- Sphaerium solidulum* (Prime). Cedar River below dam at Cedar Falls.

Sphaerium striatinum (Lam.) Dry Run and Cedar River
below dam at Cedar Falls; Big Creek at La Porte City;
East Bluffs near Vinton.

Pisidium abditum (Hald.) Stony Cut near Vinton.

Pisidium variabile (Prime). East Bluffs near Vinton, Iowa.

A PLEISTOCENE MOLLUSCAN FAUNA FROM NEAR GOLETA, SANTA BARBARA COUNTY, CALIFORNIA

BY I. S. OLDROYD AND U. S. GRANT IV

The fauna considered in this paper was obtained from a fossiliferous stratum exposed in the embankment back of the beach about a mile and a half west of Goleta Point and four miles west-southwest of the town of Goleta, Santa Barbara County, California.

The fossils occurred abundantly in a very fine-grained unconsolidated sand of a bluish gray color, stained in some places a yellowish brown due to iron rust. The stratum is only three or four feet thick and dips at a very small angle toward the west. It overlies unconformably a bluish gray clay shale and is overlain by sand and soil which covers the low terrace.

The underlying clay shale was only briefly examined but appeared to be nearly devoid of fossils, only a non-diagnostic *Cryptomya* being seen in the short time devoted to its examination. Lithologically, this underlying sediment much resembles some of the Pico clay shale, of Pliocene age, which occurs in the foothills some miles to the east of the town of Ventura. Alternate swelling and shrinking of the shale on the face of the bank, due to variation in moisture content, has caused flaking off of irregular pieces with curved surfaces.

The fossils are concentrated in the lower part of the sandy stratum overlying the clay shale. Many individuals of *Pholadidea californica* are still in the holes in the clay shale in which they lived, and other mud-loving fragile species could not have been transported very far. A noticeable feature of the collections we have examined is the excellent preservation of